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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,221	12/01/2003	Hiroshi Kamohara	0171-1044P	9834
2292	7590	01/12/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			PENG, KUO LIANG	
			ART UNIT	PAPER NUMBER

1712

DATE MAILED: 01/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

10/724,221

Applicant(s)

KAMOHARA ET AL.

Examiner

Kuo-Liang Peng

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 4/9/04 IDS.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4/9/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The Applicants' preliminary amendment filed on December 1, 2003 was received.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Kamohara (US 5 907 002).

For Claims 1 and 3-4, Kamohara discloses dental impression silicone composition comprising the following components (A) to (G): (A) 100 parts by weight of an organopolysiloxane having at least two aliphatic unsaturated hydrocarbons in one molecule; (B) from 0.1 to 30 parts by weight of an organohydrogen polysiloxane having at least three hydrogen atoms directly bonded to the silicon atom in one molecule; (C) from 10 to 500 ppm, based on the total amount of the components (A) and (B), of a silicone-soluble platinum

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compound; (D) from 10 to 500 parts by weight of an inorganic filler; (E) from 5 to 50 parts by weight of a fine silica powder having a BET specific surface area of from 50 to 500 m²/g, whose surface is made hydrophobic; (F) from 0.5 to 50 parts by weight of a nonionic surfactant; and (G) from 10 to 200 parts by weight of a methylphenyl polysiloxane. (col. 2, line 59 to col. 3, line 12) The methylphenyl polysiloxanes are further described in cl. 5, lines 34-61, which can be exemplified as those have phenyl content of 25 mol% and 50 mol% in Examples. For Claim 2, suitable examples of the nonionic surfactant as the component (F) include nonionic surfactants having a combination of a hydrophilic group with an alkyl group as a lipophilic group, or nonionic surfactants having a combination of a hydrophilic group with a fluorocarbon group in which hydrogen atoms in an alkyl group as a lipophilic group are substituted with fluorine atoms. The nonionic surfactants having a combination of a hydrophilic group with an alkyl group as a lipophilic group include: (1) Ether types such as polyoxyethylene alkyl ethers, polyoxypropylene alkyl ethers, and polyoxyethylene alkylphenyl ethers, in which the addition mole number of ethylene oxide or propylene oxide is from 1 to 30, and the carbon atom number of the alkyl group is from 12 to 22; (2) Partial ester types between a polyhydric alcohol and a fatty acid having 12 to 22 carbon atoms, such as sorbitan fatty acid esters, glycerin fatty acid esters,

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polyglycerin fatty acid esters, ethylene glycol fatty acid esters, polyethylene glycol fatty acid esters, propylene glycol fatty acid esters, and pentaerythritol fatty acid esters; (3) Ether ester types such as polyoxyethylene sorbitan fatty acid esters, polyoxyethylene sorbitol fatty acid esters, polyoxyethylene mannitol fatty acid esters, polyoxyethylene glycerin fatty acid esters, and polyoxyethylene propylene glycol monomeric fatty acid esters, in which the addition mole number of ethylene oxide is from 1 to 30, and the carbon atom number of the fatty acid is from 12 to 22; and (4) Ester types having from 1 to 30 moles of ethylene oxide addition polymerized therewith, such as polyoxyethylene castor oil/hardened castor oil, polyoxyethylene lanolin derivatives, and polyoxyethylene beeswax derivatives. Examples of the nonionic surfactants having a combination of a hydrophilic group with a fluorocarbon group in which hydrogen atoms in an alkyl group as a lipophilic group are substituted with fluorine atoms include those represented by the following formulae: (1) $R_f-O(C_n H_{2n} O)_n H$ (2) $R_f O(CH_2 n) l O(C_n H_{2n} O)_m$ (3) $R_f B N(R')(C_2 H_4 O)_n H$ wherein R_f represents a fluorinated aliphatic group or a fluorinated aromatic group each having from 1 to 20 carbon atom, provided that the aliphatic group may be linear, branched, or cyclic; B represents a divalent connecting group (e.g., $--SO_2 --$, $--CO--$); R' represents a hydrogen atom or an alkyl group having from 1 to 20 carbon atoms;

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and l, m, and n each represents an integer of from 1 to 50. The nonionic surfactant which is used in the present invention effectively acts for the purpose of improving the wettability against water in the co-presence of the components (E) and (G). The content of the nonionic surfactant must be in the range of from 0.5 to 50 parts by weight based on 100 parts by weight of the component (A). In the case where the content of the component (F) is less than 0.5 part by weight, the wettability against water is insufficient, while in the case where the content of the component (F) exceeds 50 parts by weight, the permanent deformation is large. These nonionic surfactants can be used alone or in admixture of two or more. (col. 4, line 39 to col. 5, line 33)

4. The "X" references, EP 934 959 and US 5 580 921, cited in the international search report are not relied upon because of the following reasons:

EP 934 959 discloses a composition comprising a vinyl terminated diphenylsiloxane-dimethylsiloxane copolymer ([0024]). However, it does not teach or fairly suggest the phenyl content of the copolymer. Especially, Applicants indicate the criticality of the phenyl content in the specification. (page 2, lines 5-24 and page 3, lines 11-22)

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US 5 580 921 discloses a siloxane composition comprising a polyether represented by the formula II (Claim 1). However, it does not teach or fairly suggest a polyether wherein both chain ends are capped by monovalent radicals as set forth in the present invention.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuo-Liang Peng whose telephone number is (571) 272-1091. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski, can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair->


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direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

klp

January 7, 2005

Kuo-Liang Peng
Primary Examiner
Art Unit 1712



KUO-LIANG PENG
PRIMARY EXAMINER